C-3.7 Classify organic compounds in terms of their functional group. (additional content/depth)

Revised Taxonomy Level 2.3 B (Classify conceptual knowledge)

This concept was not covered in physical science

It is essential for students to

- ❖ Name and draw structural formulas of alkenes, alkynes, benzene and cyclohexanes.
- ❖ Define the term functional group
- * Recognize the following functional groups when presented with the structural formula of a compound
- Understand the rules of organic nomenclature as they apply to naming compounds which contain each of the following functional groups

Assessment

As the indicator states, the major focus of assessment is to <u>classify</u> organic substances based on the functional group as illustrated by a structural formula.

As the taxonomy verb is classify as opposed to distinguish, the assessment item should include all of the relevant information that is needed to make the distinction between categories, students should not have to pick out the relevant information.

As the indicator has a cognitive dimension of <u>conceptual knowledge</u>, assessment items will require that students understand each of these categories in terms of the "interrelationships among the basic elements within the category", in other words students must show that they understand the criteria for each category. Assessments will require that students can classify <u>any</u> given structural formula.